

AMENDMENT TO THE CLAIMS

Please amend the claims as shown below. A complete listing of all pending claims is presented.

1. (Original) A data slice circuit for separating data added to a prescribed signal of predetermined specifications superposed on a video signal based on a slice level, comprising:

a composite synchronous signal separation circuit for separating a composite synchronous signal from a video signal;

a line detection circuit for detecting a line on which a desired prescribed signal is superposed from the composite synchronous signal separation circuit and outputting a line detection pulse only during a period of the detected line;

a window pulse generation circuit for receiving the line detection pulse of the line detection circuit, outputting a pulse during a period for averaging the prescribed signal superposed on the detected line and changing a period for generating the pulse by the specifications of the superposed prescribed signal;

a data slice reference voltage detection circuit for sampling and holding an average voltage of the prescribed signal only during a period of the pulse output by the window pulse generation circuit and detecting a data slice reference voltage; and

a data slice level generation circuit for generating the slice level by adding a direct current voltage to an output voltage of the data slice reference voltage detection circuit and changing the direct current voltage to be added in accordance with the line detected by the line detection circuit.

2. (Currently Amended) A data slice circuit for separating data added to a prescribed signal of predetermined specifications superposed on a video signal based on a slice level, comprising:

a composite synchronous signal separation circuit for separating a composite synchronous signal from a video signal;

a line detection circuit for detecting a line on which a desired prescribed signal is superposed from the composite synchronous signal separation circuit and outputting a line detection pulse only during a period of the detected line;

a window pulse generation circuit for receiving the line detection pulse of the line detection circuit, outputting a pulse during a period for averaging the prescribed signal superposed on the detected line and changing a period for generating the pulse by the specifications of the superposed prescribed signal;

a data slice reference voltage detection circuit for sampling and holding an average voltage of the prescribed signal only during a period of the pulse output by the window pulse generation circuit and detecting a data slice reference voltage; and

a data slice level generation circuit for generating the slice level by adding a direct current voltage to an output voltage of the data slice reference voltage detection circuit and changing the direct current voltage to be added in accordance with the line detected by the line detection circuit; [A data slice circuit as set forth in claim 1,] wherein:

said prescribed signal is superposed on a video signal at a vertical blanking interval; and

said window pulse generation circuit generates a pulse becoming active during a period of a CRI signal when said prescribed signal includes a CRI signal and generates a pulse becoming active during a back porch immediately after a rise of a composite synchronous signal when a CRI signal is not included and only a reference signal is included.

3. (Original) A data slice circuit as set forth in claim 2, wherein said data slice reference voltage generation circuit outputs an average voltage value of a CRI signal when said prescribed signal includes a CRI signal and outputs a voltage value at a pedestal level when the CRI signal is not included and only a reference signal is included.

4. (Original) A data slice circuit as set forth in claim 2, wherein said data slice level generation circuit is supplied with a first direct current voltage which is lower than the pedestal level and a second direct current voltage which is higher than the pedestal level, outputs an output voltage of said data slice reference voltage detection circuit as it

is as a data slice level when said prescribed signal includes a CRI signal, and generates as a data slice level the output voltage at a level added with a voltage in accordance with a difference of said second direct current voltage and the first direct current voltage as a data slice level when the CRI signal is not included and only a reference signal is included.

5. (Original) A data slice circuit as set forth in claim 3, wherein said data slice level generation circuit is supplied with a first direct current voltage which is lower than the pedestal level and a second direct current voltage which is higher than the pedestal level, outputs an output voltage of said data slice reference voltage detection circuit as it is as a data slice level when said prescribed signal includes a CRI signal, and generates as a data slice level the output voltage at a level added with a voltage in accordance with a difference of said second direct current voltage and the first direct current voltage as a data slice level when the CRI signal is not included and only a reference signal is included.

6. (Original) A data slice circuit for separating data added to a prescribed signal of predetermined specifications superposed on a video signal based on a slice level, comprising:

- a sync chip clamping circuit for performing sync chip clamping on a video signal;
- a composite synchronous signal separation circuit for separating a composite synchronous signal from a video signal;

- a line detection circuit for detecting a line on which a desired prescribed signal is superposed from the composite synchronous signal separation circuit and outputting a line detection pulse only during a period of the detected line;

- a window pulse generation circuit for receiving the line detection pulse of the line detection circuit, outputting a pulse during a period for averaging the prescribed signal superposed on the detected line, and changing a period for generating the pulse by the specifications of the superposed prescribed signal;

- a data slice reference voltage detection circuit for sampling and holding an average voltage of the prescribed signal clamped at the sync chip clamping circuit only

during a period of the pulse output by the window pulse generation circuit and detecting a data slice reference voltage; and

a data slice level generation circuit for generating the slice level by adding a direct current voltage to an output voltage of the data slice reference voltage detection circuit and changing the direct current voltage to be added in accordance with the line detected by the line detection circuit.

7. (Currently Amended) A data slice circuit for separating data added to a prescribed signal of predetermined specifications superposed on a video signal based on a slice level, comprising:

a sync chip clamping circuit for performing sync chip clamping on a video signal;

a composite synchronous signal separation circuit for separating a composite synchronous signal from a video signal;

a line detection circuit for detecting a line on which a desired prescribed signal is superposed from the composite synchronous signal separation circuit and outputting a line detection pulse only during a period of the detected line;

a window pulse generation circuit for receiving the line detection pulse of the line detection circuit, outputting a pulse during a period for averaging the prescribed signal superposed on the detected line, and changing a period for generating the pulse by the specifications of the superposed prescribed signal;

a data slice reference voltage detection circuit for sampling and holding an average voltage of the prescribed signal clamped at the sync chip clamping circuit only during a period of the pulse output by the window pulse generation circuit and detecting a data slice reference voltage; and

a data slice level generation circuit for generating the slice level by adding a direct current voltage to an output voltage of the data slice reference voltage detection circuit and changing the direct current voltage to be added in accordance with the line detected by the line detection circuit; [A data slice circuit as set forth in claim 6,] wherein:

said prescribed signal is superposed on a video signal at a vertical blanking interval; and

said window pulse generation circuit generates a pulse becoming active during a period of a CRI signal when said prescribed signal includes a CRI signal and generates a pulse becoming active during a back porch immediately after a rise of a composite synchronous signal when a CRI signal is not included and only a reference signal is included.

8. (Original) A data slice circuit as set forth in claim 7, wherein said data slice reference voltage generation circuit outputs an average voltage value of a CRI signal when said prescribed signal includes a CRI signal and outputs a voltage value at a pedestal level when the CRI signal is not included and only a reference signal is included.

9. (Original) A data slice circuit as set forth in claim 7, wherein said data slice level generation circuit is supplied with a first direct current voltage which is lower than the pedestal level and a second direct current voltage which is higher than the pedestal level, outputs an output voltage of said data slice reference voltage detection circuit as it is as a data slice level when said prescribed signal includes a CRI signal, and generates as a data slice level the output voltage at a level added with a voltage in accordance with a difference of said second direct current voltage and the first direct current voltage as a data slice level when the CRI signal is not included and only a reference signal is included.

10. (Original) A data slice circuit as set forth in claim 8, wherein said data slice level generation circuit is supplied with a first direct current voltage which is lower than the pedestal level and a second direct current voltage which is higher than the pedestal level, outputs an output voltage of said data slice reference voltage detection circuit as it is as a data slice level when said prescribed signal includes a CRI signal, and generates as a data slice level the output voltage at a level added with a voltage in accordance with a difference of said second direct current voltage and the first direct current voltage as a data slice level when the CRI signal is not included and only a reference signal is included.